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APPLICATION NO.	FILING DATE	FIRST NAME OF INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,212	11/05/2001	Harry A. Loder	55243US019	1648

Office of Intellectual Property Counsel  
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EXAMINER

PAK, SUNG H

ART UNIT PAPER NUMBER

2874

DATE MAILED: 12/31/2002

Please find below and or attached an Office communication concerning this application or proceeding.

Application No.

09/992,212

Applicant(s)

LODER ET AL.

## Office Action Summary

Examiner

Sung H. Pak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.

☐ Notice of Draftsman's Patent Drawing Review (PTO-449)  
☐ Information Disclosure Statement(s) (PTO-144) (b) Paper Notice

☐ Notice of Informal Patent Application (PTO-152)  
☐ Other

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### DETAILED ACTION

In view of the applicants' amendment filed 10/15/2002, all the requested changes have been made. The pending claims have been carefully reconsidered by the examiner, however they are still deemed unpatentable. Please refer to Remarks for discussion.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Savegh et al (US 5,182,785) as applied in the prior office action.

Savegh et al discloses an optical fiber with all the limitations set forth in the claims, including a method for controlling the bend radius of at least a portion of an optical fiber, comprising the steps of: providing a jacket of a heat shrinkable-material; placing the jacket around the fiber; bending the portion of the fiber at a desired bend angle; shrinking the jacket around the optical fiber (abstract and fig. 1). Also it discloses an optical fiber apparatus with structural limitations resulting from such method.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Savegh et al in view of Daoud (US 6,263,144) as applied in the prior office action.

Savegh et al discloses an optical fiber with all the limitations set forth in the claims, except for bending the fiber in two curves, which are in different planes. Daoud discloses an optical fiber routing device having two curves which are in different planes (Fig. 1). Daoud teaches that such configuration is advantageous because it does not impede access to other optical components and maintains minimum bend radius of the

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to have bending in fiber in two curves of different planes. Such arrangement would be desirable because it does not impede access to other optical components and maintains minimal bend radius.

### ***Remarks***

Claim rejections under 35 USC 102:

Starting on page 3 of the applicants' response, it is argued that Savegh et al disclose a high-flex optical fiber coil cable, which has "diametrically opposite objectives" as the invention disclosed in the instant application. While it is true that the device disclosed in Savegh et al reference does allow for some flexing of fibers, the claimed limitations of the instant application, as recited, read on the reference and are fully anticipated by the prior art.

Specifically, Savegh et al discloses a method comprising, a) providing a heat shrinkable jacket and b) placing it around the portion of the optical fiber cable (Fig. 2); c) bending the portion of the fiber at a desired angle (Fig. 1); d) shrinking the jacket and heat setting the material, making the fiber assume desired bend angle (abstract, Fig. 1). The resulting optical fiber assumes desired angle as shown in Fig. 1, when there is no external force applied. When there is external force, the fiber resists bending, but it does allow for some limited movement. While the objectives of Savegh et al device may be different from that of the instant application, the reference fully anticipates the claimed limitations of the instant application as they are currently recited. Therefore, the

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Claim rejections under 35 USC 103:

On page 4 of the applicants' response, it is argued that there is no suggestion in Savegh et al reference for using mandrill or shaping device as disclosed in Daoud reference. However, the use of mandrill or shaping device is inherent in Savegh et al device for setting the fiber at desired bending angle. Also, the modification of Savegh et al device for using the shaping device of Daoud would be obvious to a person of ordinary skill in the art, as Daoud explicitly states the advantage of the disclosed invention over the prior art fiber-winding configuration (as disclosed in Savegh et al, for example). Therefore, the claim rejection based on 35 USC 103 is still proper.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (703) 308-4880. The examiner can normally be reached on Monday - Thursday : 6:30am-5:00pm.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Sung H. Pak  
Examiner  
Art Unit 2874

sp  
December 26, 2002

